

## **Road Closures and Diversions**

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### **1. Summary**

- 1.1. The highway service has seen considerable change and improvements over the last twelve months. In July 2020, the Council appointed a new Assistant Director of Infrastructure and Head of Highways, both of whom have continued to implement and evolve the highways improvement plan. Many areas of the service have been transformed in that period and a culture of high performance is being realised within the service however there continues to remain areas for improvement.
- 1.2. It is recognised that engagement to ensure the appropriate use of road closures has at times been inadequate and has led to avoidable issues. This has often been unavoidable in recent years due to the short notice of the works and resourcing capacity but there are many instances where improvements could have been made and there is active work being undertaken to ensure that the service continues to improve its engagement with local communities
- 1.3. This report provides a background of the issues that have led to the current situation and the services current proposals to improve its approach to closures and diversion routes.

### **2. Recommendations**

**The Committee is asked to;**

- 2.1. Note the contents of this report;
- 2.2. Identify areas of concern, not already considered within the report for consideration as part of the ongoing improvements.

## **REPORT**

### **3. Risk Assessment and Opportunities Appraisal**

- 3.1 The council have a duty to maintain the highway in a fit purpose and to maintain safety. In order to ensure that safety is maintained the council seeks to repair defects that it identifies and considers represents either an immediate risk or potential risk to personal injury within 1, 5 or 28 days depending on the assessed seriousness of the defect.
- 3.2 The current funding environment means that the service is often having to react to varying amounts of in year funding from the Department of Transport meaning accelerating forward programmes and significantly reducing the timescales for which the service is able to engage. The current proposal for additional investment into highways which went to Council on 15<sup>th</sup> July would mean a more fixed funding profile which would enable a two-year cycle of identify, engage and design in year one and consult and construct in year two.

### **4. Financial Implications**

- 4.1. There are no direct financial implications as a result of this report.
- 4.2. Any alternative improvements proposed by Committee could have the potential to require additional resources to implement which could be unaffordable within existing budgets.

### **5. Climate Change Appraisal**

- 5.1. There are no direct climate change implications as a result of this report.
- 5.2. Changes to ways of working could have the potential to reduce total travel distance of road users affected by road closures and as a result reduce the carbon generated by such trips.

### **6. Background**

- 6.1. The highways are an essential asset that ensures the safe and effective movement of people and goods throughout the county. Any works on the highway, whether it be the council's own works or that of third parties, can at times require a road closure to ensure the safety of both road users and works operatives depending on the nature of the activity.

- 6.2. Anyone who wants to undertake works on the highway require a permit from the councils Streetworks Team. The team assess all applications, including traffic management proposals such as road closures, to ensure that they are necessary, appropriate and minimise the impact on road users as much as possible due to either the extent of closure or its duration. Many works are challenged by the Streetworks Team and traffic management proposals amended as far as practicable.
- 6.3. Works can broadly be split into two categories emergency works and planned works. Emergency works are by their nature reactive and legislation under the New Roads and Streetworks Act 1991 (NRSWA) allows for a permit to be retrospectively claimed up to two days after works start. These works can often give little opportunity for the Streetworks team to engage in pro-active traffic management and often result in amendments taking place during the duration of the works.
- 6.4. Planned works require at least 3 months' notice prior to the start of works under NRSWA and as such mean that the Streetworks team are able to better inform and coordinate activities of both council and third parties works.
- 6.5. All notified works are shown on the website Roadworks.org giving information about the works promotor, nature of the works and duration. Where works are 'planned' the permit also requires that key stakeholders be informed/consulted in a timely manner.
- 6.6. Where roads are closed and diversions are in place, best practice advises that traffic should be formally diverted to roads of a similar road classification, where possible, to ensure that they are suited to the volume of traffic and HGV's to prevent issues of safety being transferred to areas beyond the works sites.
- 6.7. As a rural authority Shropshire has relatively few A and B roads on which to divert such traffic and therefore diversions can at times be extremely lengthy and unsuited to local traffic. Industry practice typically suggests not formally signing a diversion for non-HGV's as it can lead to confusion and can channel an unacceptable level of traffic to roads not suited to that volume and is far better dispersed naturally as local drivers use a variety of alternative routes.
- 6.8. Road closures are often advertised for longer than required due to various uncertainties, as it can be difficult to extend road space access due to the potential knock on impact of works elsewhere in the area which have been carefully coordinated to reduce the impact on road users.
- 6.9. Many activities are weather dependent and therefore can be delayed due to rain. This has a particular impact for programmes of work such as surface dressing where a contractor is brought into undertake a series of schemes across the county moving from one to another as each is completed. Rain during the programme can therefore significantly delay the start date of those schemes later in the programme. The setting out of physical signing of the

road closure is however delayed until closer to the actual start date when timings are more certain.

- 6.10. In the past year there has been an increase in the number of complaints relating to road closures and associated diversions. There are a number of reasons for this being the case.
- a) Varying budgets and in year investments
  - b) Deteriorating condition of the road network and improved repairs process.
  - c) Severe Weather

### **Varying budgets and in year investments**

- 6.11. Last year the Department of Transport allocated additional funding to the council within the financial year. This funding increased the planned budget spend of £8m to over £20m and was required to be spent within the financial year. Whilst it is not unusual to receive in year funding from DfT the sheer scale of this additional funding was exceptional and not anticipated.
- 6.12. Planned maintenance is usual undertaken on a two year cycle of identify, survey, consult, design in year one and inform and build in year two. An element of over programming is undertaking in anticipation of additional funding for delivery in March/ April dependent on whether in year funding is made available. Additional in-year funding beyond that anticipated therefore significantly disrupts this cycle.
- 6.13. The nature of surfacing schemes are that many of them require the road temperature to be above a certain level and for the surface to be reasonably dry, to ensure new material adheres successfully and therefore such schemes are typically carried out between the beginning of April and end of August each year when the road temperature is generally at the right levels (road temperature is typically more stable than air temperature) and rain less likely. The longevity of any works reduces the further outside of that window works are undertaken and can make it difficult to receive warranties from contractors for works outside of those months.
- 6.14. The sheer scale of funding last year however meant that delivery exceeded even the indicative programme of works identified for year two and as such meant condensing a two year process into just three months in order to be able to spend the funding within the timescales specified in the grant.
- 6.15. Whilst typically the service would seek to consult on road closures in a timely manner for the annual programmes of work the accelerated process and the need to align with windows of availability within the contracting supply chain, at a time when all other highway authorities are facing similar challenges, has meant that often there was only a very short period of time between a scheme being identified and a contractor being available to deliver the works.
- 6.16. The impact of the additional funding from last year has meant that forward programmes of work had been used up and therefore the service has similarly

had to condense its processes this year to ensure that a programme of works was able to be delivered this year.

- 6.17. The Department for Transport has not allocated any in-year funding this year and it is anticipated that no significant level of in-year funding will be made available in the next few years. This will allow the service to move back to a two year process cycle and should improve engagement on road closures as a result of planned activity.

### **Deteriorating condition of the road network and improved repairs process**

- 6.18. As a highway's authority, we have a clear set of responsibilities which are identified with the Highways Act 1980.
- 6.19. We have a statutory duty to repair any defects that may cause a risk to personal injury and the councils policies state that we will make these defects safe within 1, 5 or 28 days depending on the severity of the defect.
- 6.20. Over recent years the councils have typically undertaken temporary repairs to make such defects safe with over 75% of defect repairs being filling the pothole to remove the immediate danger. As a result of the highways improvement plan implemented over the last year, and which has been presented to Committee previously, the service and Kier, have made several operational efficiencies which has now made a right first time permanent repair both practical and affordable within existing budgets and has reduced the number of temporary defects to just 25%. The remainder being sites which take longer plan traffic management such as roundabouts and key junctions, sites that are scheduled for more extensive repair in the near future, or during times of particular peak reporting such as the winter peak in January and February or after severe weather.
- 6.21. Any repair taking longer than 15 minutes and which obstructs the full width of the road requires a formal road closure. A permanent repair does take longer than this time and as such can often require a road closure in a way that a temporary repair does not, particularly if the contractor is undertaking a series of repairs along a single road.
- 6.22. Shropshire, as is the case with a vast majority of highway authorities, is seeing a network in deterioration due to insufficient funding being made available to maintain the networks in a stable condition. Surveys show that approximately 21% of local authority roads across England are considered to be in poor condition and in need of major repair, an increase from 13% in 2015.
- 6.23. This deterioration in condition is reflected in the number of potholes that are forming on the network, with almost 16,000 being reported on the network between November and January alone compared to 11,000 during the same period last year.

- 6.24. It is recognised that pot-holes have been one of the biggest concerns of road users and this is a key area focus of the service. Both in terms of improving the quality of work carried out, but also reducing the backlog as quickly as possible. In order to achieve that, resource levels have been increased. This has put pressure on our Street works team due to the amount of network access required. In some instances, our contractor (Kier) have had to apply for 'emergency closures' which do not provide the time required to consult fully with stakeholders due to the severity of some of the defects that have been reported.
- 6.25. The deterioration of the network and improvements to repairs has therefore seen a significant increase in the number of road closures required in the past year. This new approach is beneficial and means the service are now undertaking meaningful repairs, which improve the road infrastructure and over time reduce the likelihood of potholes re-forming in the short to medium term and also reduces the reactive workload to ensure a greater proportion of budget can be spent on preventative maintenance.
- 6.26. It is recognised that the new ways of working are a disruptive process in the short term the longer-term outcome will mean reduced need to close roads in the future.
- 6.27. As a result of similar investment in utility infrastructure and increasing demand as new housing and employment sites are developed the council is seeing similar rise in utility activity.

### **Severe Weather**

- 6.28. Over the past two years, the significant flooding events that Shropshire has experienced across the county has had a visible and immediate impact on the safety of roads which became blocked by flood waters and resulted in the need to close roads with immediate effect to prevent road users driving or walking through flood water.
- 6.29. There has however, been a subsequent impact on the highway network where fast flowing flood waters have eroded away embankments supporting roads and the foundations of some bridges.
- 6.30. This has necessitated a number of roads across the county being closed or one-way traffic enabled by temporary traffic lights, due to the roads being unsafe to traffic.
- 6.31. The nature of these failures however often mean complex engineering solutions are required and often necessitate negotiations with third party land owners to undertake repairs, which take both time to develop and are costly to undertake and as such require to be programmed into future budgets to ensure that costs are identified for developing suitable designs and firm budget requirements and subsequently budgets identified for repairs.

- 6.32. These sites are therefore closed for a longer term with approximately 8 sites having been closed for longer than 6 months.

### **Initiatives for improvement**

- 6.33. **Staffing** - The highways team is working closely with Kier to improve every aspect of highway maintenance to ensure that the council provides excellent value for money and a customer focussed service. There are limits of what can be achieved within current funding however. Shropshire Highways in recent years has had considerably less budget allocation per mile of highway than the national average with £7,322 per mile compared to the national average of £10,925. This is further exacerbated by the rural nature of the county and the increased unit cost that arises from the relatively longer time that it takes to traverse the county compared to authorities with a larger strategic road network.
- 6.34. This means that the council has similarly less staffing resources to other authorities which has become stretched as the deterioration of the network has accelerated in recent years and has changed the focus of the roles of officers from one of engagement to predominantly being reactive to maintain safety.
- 6.35. It has recently been acknowledged however, that some of this staffing is able to be recharged to capital budgets which will enable additional revenue to be released to increase the number of staff by a small amount to improve the current levels of engagement once the recharge process is implemented.
- 6.36. **Budgets** - In the past Department of Transport allocated funding to authorities over a six year timeline with the occasional opportunity to bid for additional funding for specific initiatives. This has changed in the last few years with budgets only being allocated annually and a significant increase in funding available through competitive processes. This makes it very difficult to plan staffing and contractor resources and develop informed forward programming
- 6.37. The report to council on 15<sup>th</sup> July seeking a mandate for investigating investment opportunities into highways will seek to identify a planned forward budget for highway maintenance. Should additional investment be agreed then staffing resources for both the council and contractors can be increased as a result of the budget certainty. It will also allow for the engagement of the broader supply chain over the medium term to increase certainty of delivery and ensure that the highways team do what they said they would do, when they said they would do it.
- 6.38. This will also enable our streetworks team, contractors and other delivery partners to be more actively involved in the day to day delivery of the councils works programmes to ensure that traffic management arrangements are appropriate and reduces disruption as much as practicable.
- 6.39. **Signing and Communications** – The service has received several complaints about advance diversion signing not stating where the specific

point of closure, to enable drivers to make more informed choices to avoid the works. In some instances, the signing can be some distance from the works site to enable diversions to be undertaken at appropriate points, particularly on A roads and so more informed knowledge of the closure could make a significant difference.

- 6.40. Kier are investigating the purchase of signing which can be easily customised to include the location of the closure which will help address this issue.
- 6.41. Increased staffing and improved programme certainty will ensure opportunities for more proactive engagement with local stakeholders to identify potential issues prior to works starting and ensure that appropriate diversions and signing is in place.

## **7. Conclusions**

- 7.1. The highway service has made significant and tangible steps in improving its service delivery over the last year however, the team still faces challenges in managing demand due to available resources.
- 7.2. Road closures and diversions are an inevitable consequence of highway maintenance and reflective of the scale of work the service are currently undertaking.
- 7.3. Uncertainty of budgets and varying in-year budget allocations from the Department of Transport has at times required significant condensing of normal processes. Whilst the vast majority of schemes that have been delivered in this way have received no complaints. There are a few that have had significant impacts on local areas due to the inability to engage in a timely manner.
- 7.4. The continuing deterioration of the road network has increased the number of reactive works that have taken place. Whilst increasing the number of these that are addressed using permanent repairs is an overall positive step over the longer term this significantly increased the number of short notice road closures at a time when the delivery of resurfacing schemes was also taking place which further exacerbated the situation.
- 7.5. Were the Council to choose to invest additional budget over a period of years it would enable the ability for more proactive forward planning of resources and activity to ensure improved engagement. It would also allow for preventative maintenance to be undertaken which would reduce the number of reactive works required.
- 7.6. The service has identified ways in which road closure signing could be improved. This would involve identifying the specific location of the closure point. This would enable driver to make better decisions and prevent drivers 'chancing it' and arriving at the closure point, at which point are then forced to take less suitable roads at the last minute.



- 7.7. There is an ongoing need for dynamic and continuous improvement programmes to be in place to ensure that the service derives as much value from its budgets as possible and continues to reflect the contemporary needs of road users.

**List of Background Papers (This MUST be completed for all reports, but does not include items containing exempt or confidential information)**

None

**Cabinet Member (Portfolio Holder) - Cllr Steve Charmley**

**Local Member - All**

**Appendices - None**